

Deliverable 1 Submission

Basic Terminology

What is a web server?

A web server is both a hardware and software solution that serves content, like web pages, to end-users over the internet. The hardware hosts the software capable of using protocols (mainly HTTP) to deliver this content.

What is Apache?

Apache, also known as Apache HTTP server, is a widely-used web server software that is open-source and maintained by the Apache Software Foundation. It is known for its role in the initial growth of the World Wide Web.

What are some different web server applications?

Application Name	License	Project's Website
Apache HTTP Server	Apache License 2.0	Apache
Nginx	BSD-like license	Nginx
Microsoft IIS	Proprietary	Microsoft IIS

Apache HTTP Server



Apache is a free and open-source cross-platform web server software, released under the terms of Apache License 2.0. It is arguably the most popular web server in use today.

Nginx



Nginx is a web server that can also be used as a reverse proxy, load balancer, and HTTP cache. It uses a non-threaded, event-driven architecture which enables it to provide high performance and scalability.

Microsoft IIS



Microsoft Internet Information Services (IIS) is a set of Internet-based services for servers using Microsoft Windows. It is an extensible web server created by Microsoft for use with Windows NT family.

What is virtualization?

Virtualization is the technology that allows you to create multiple simulated environments from a single physical hardware system, known as virtual machines (VMs). This technology is used to consolidate hardware and improve efficiency.

What is VirtualBox?



VirtualBox is a free, open-source hypervisor developed by Oracle Corporation. It allows users to run multiple guest operating systems on a single host machine.

What is a virtual machine?

A virtual machine is a software emulation of a physical computer, which runs an operating system and applications as if they were running on a physical machine.

What is Ubuntu Server?



Ubuntu Server is a Debian-based Linux operating system designed for servers. It is developed by Canonical Ltd. and provides users with a stable, secure, and scalable environment for applications.

What is a firewall?

A firewall is a network security device that monitors and controls incoming and outgoing network traffic based on predetermined security rules. It acts as a barrier between a trusted and an untrusted network.

What is SSH?

SSH, or Secure Shell, is a cryptographic network protocol used for secure connection between a client and a server and for executing commands over this secure channel.

Other Relevant Concepts

- **Systemd** Systemd is a system and service manager for Linux operating systems that uses a daemon to manage and maintain system states.
- **Systemctl** Systemctl is a command-line utility that allows users to analyze and control the state of the "systemd" system and service manager.
- **Virtual hosts** Virtual hosts allow a single web server to serve multiple websites or domains. This is a crucial feature in Apache and other web servers.
- **Log file** Log files in a web server environment are files that record activities. These logs are vital for troubleshooting and understanding traffic data.